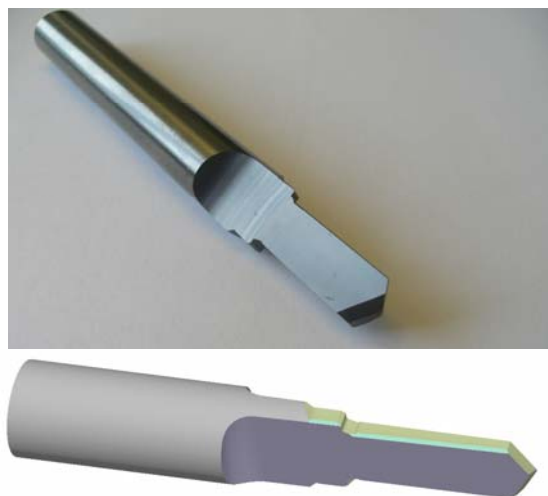


Form "Lanzenbohrer" Ø12 Z2

A06-100

The form spade drill is ground from a cylindrical carbide blank. The plunge roughing operation using a 1A1 wheel for pregrinding the tapered blade is the key operation for a stable production over large batches of tools. The DXQ Profiledefinition allows an easy separation of cutting and cylindrical ground parts along the profile.



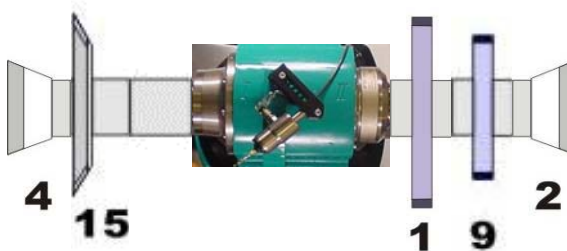
1. Cycletime for Production

Tool specifications								
Diameter 12 mm, Cutting edges 2, Length of cutting edge 35 mm, Shear angle 1 deg								
Material HM								
Operations	Probe	Spade rough.	Spade fin.	Gashing	Prf Rough	Prf Pregr	Prf fin	Prf Cyl
Feed [mm/Min]	2000	50	300	150	80	70	90	10
Power [kW]		2	1	2	2	1	1	1
Cutting feed [m/s]		18	22	22	22	24	24	24
Used wheels								
Grinding time [s]	18	381	156	34	150	75	57	220
Total cycle time	18 Min 12							

The mentioned cycle times are indicative. The material to be ground, different grinding wheels or other coolants can influence the cycle times considerably.

2. Used Grinding Wheels

9 Ø100 1A1 D64
 1 Ø125 1A1 D64
 15 Ø125 1V1 D64
 4 Ø75 11V9 D64
 2 Ø75 12A2 D35



3. Machine and Software Requirements

Machines: 5 axes CNC grinders : CORVUS GDS, GEMINI DMR, NORMA CFG
 Control: Fanuc 31i
 Coolant: Synthetic Oil, pressure 6 - 7 bar
 Software: Quinto 5

responsible engineer: OP, 25.2.07

www.schneeberger.ch

J. SCHNEEBERGER Maschinen AG 4914 Roggwil Switzerland
 Subsidiaries in: France, Deutschland, Italia, United States, China

TECHNOLOGY
FOR TOOLING